



Submitted by Electronic Mail

Texas Commission on Environmental Quality Air Quality Division PO Box 13087 Austin, TX 78711-3087

Attn: VW Settlement

RE: Comments Regarding the Volkswagen Environmental Mitigation Trust: Draft Beneficiary Mitigation Plan for Texas

Dear Texas Commission on Environmental Quality (TCEQ):

Golden Spread Electric Cooperative, Inc. (Golden Spread) respectfully submits these comments addressing the Draft Beneficiary Mitigation Plan (Plan) for the use and distribution of the Volkswagen Mitigation Trust Fund (Trust).

I. Introduction

Golden Spread is a non-profit electric generation and transmission (G&T) cooperative headquartered in Amarillo, Texas. Its corporate purpose is to supply reliable wholesale electric power at the lowest optimal cost to its 16-member, non-profit distribution cooperatives (Members) while complying with all applicable regulatory requirements. Golden Spread's Members provide service to approximately 306,000 retail electric meters serving their Member-Consumers located over an expansive area, including the South Plains, Edwards Plateau, and Panhandle regions of Texas (covering 24 percent of the state), the Oklahoma Panhandle, and portions of Southwestern Kansas and Southeastern Colorado. Golden Spread supplies wholesale electric power to its Members in both the Electric Reliability Council of Texas (ERCOT) and the Southwest Power Pool (SPP), both regions containing significant renewable generation.

As discussed in Golden Spread's comments to TCEQ filed February 1, 2018, electric vehicles (EVs) could help maximize the integration of renewable energy in rural West Texas. As such, Golden Spread supports the development and encouragement of EVs.

Additionally, Golden Spread strongly agrees with TCEQ's decision to not limit funds used for EV charging equipment to urban "priority" areas and instead allow those funds to be utilized by rural

¹ Golden Spread's Comments Regarding the Use and Distributions of Volkswagen Air Emission Reduction Settlement Funds, filed February 1, 2018

West Texas communities by allocating them statewide. However, for the reasons discussed below, Golden Spread believes that funding for electric school buses should similarly be made available to rural West Texas communities. Golden Spread also requests that the installation costs for EV charging equipment be included under "infrastructure" funding, and that grant winners be afforded at least 18 months between the time the money is released, and construction begins.

II. Golden Spread's Comments on Texas' Draft Beneficiary Mitigation Plan for Texas

A. Utilize Mitigation Action 2 for Electric School Bus Opportunities in Rural West Texas

As discussed in its February 1, 2018 comments, Golden Spread recommends giving rural areas access for funding to replace older diesel school buses with electric buses. In its Plan, TCEQ states that one of its goals is to "reduce the potential for exposure of the public to pollutants that are often emitted along with NOx from older vehicles and equipment". Children in rural America commute longer distances² and thus may be disproportionally exposed to NOx emissions from diesel school buses. As studies in California and Connecticut show, children's exposure to harmful diesel emissions, which include NOx and potentially carcinogenic particulate matter, may be higher inside a bus cabin than it is standing outside next to the bus. In some cases, particulate concentrations on school buses were 5-15 times higher than background concentrations.³ It should be noted that there is no known "safe" exposure limit to diesel exhaust. Under this funding opportunity, rural school districts could work to replace aging diesel vehicles with electric ones, thus reducing students' diesel emission exposure from the school bus to zero. Allowing rural communities access to the electric school bus funds is consistent with the goals outlined in TCEQ's Plan. If a main goal is truly to limit children's exposure to NOx emissions, then it should not matter what part of the State the child is in. Golden Spread understands the need to limit NOx emissions in the priority zones; however, it does not make sense to completely exclude rural children as geography in this matter is irrelevant. Golden Spread also pointed out in its previous comments that rural school districts should also be allowed to take advantage of the operation and maintenance cost savings associated with owning electric school busses. While these savings are significant, they are not enough to recover the additional capital cost of purchasing an electric bus on their own. With the help of the Plan, however, more districts could afford electric buses thus help proliferate the adoption of clean transportation options.

B. Ensure Installation Costs are Included in Definition of "Infrastructure"

While there is much focus on EVs that are used to commute to a workplace and return home nearly every evening to charge, a major barrier to EV adoption is the difficulty in taking an EV on extended multi-day trips due to the relatively sparse distribution of charging stations across the vast land mass of North America. This adds to "range anxiety," which is the fear that one will run out of battery charge in between these sites. In fact, taking an EV across the country is more akin to flying an airplane from airport to airport than it is a road trip. This issue is particularly evident in

² 85% of rural elementary school students have bus rides of 30 minutes or longer, and 25% have a commute of longer than an hour. *See* Howley, Craig. *The Rural School Bus Ride in Five States: A Report to the Rural School and Community Trust* August 20, 2001: available at http://oak.cats.ohiou.edu~howleyc/howleyc.htm

³ See Wargo, John. "Children's Exposure to Diesel Exhaust on School Buses." Environment and Human Health, 2002, p 10. Available at www.ehhi.org/reports/diesel/diesel.pdf

Golden Spread's service territory where charging stations are sparse. For this reason, Golden Spread fully supports utilizing the 15% allowed toward Mitigation Action 9 statewide and not limiting it to the "priority areas." Goal 3 of the Plan states that TCEQ "will consider funding for charging infrastructure along major transportation corridors of the state.⁵" Golden Spread requests clarity on what constitutes "infrastructure," and suggests including installation costs, which can be approximately five times as much as the equipment itself.⁶ Installation costs can vary widely, depending on type of charging mount (wall or pedestal) and the various electrical, earthwork, and mechanical infrastructure needed to support the units.⁷ These costs are generally the main financial concern of facilities that may be considering EV stations.

D. Request Grant-Winners Given 18 Months to Begin Construction

Once the grants have been awarded, Golden Spread requests the winners be given at least 18 months before they are required to start construction. This is because it will take time to conduct the appropriate siting studies, etc., to be able to properly maximize the efficiency and efficacy of the expenditures. In addition, it is especially true that smaller electric cooperatives must introduce new initiatives and proposed project expenditures in the preceding year's budget. Should a cooperative earn a grant, it may take up to 18 months to research the project, prepare and finalize the next year's budget, propose the budget to the board, acquire board approval, organize, and start project management operations before construction would begin.

III. Conclusion

As EVs continue to proliferate, the supporting infrastructure must follow. Significant financial barriers exist that have suppressed greater EV infrastructure development, particularly in the rural areas of the United States. By granting rural Texans the opportunity to participate in the Plan, TCEQ has opened a path toward greater EV development that could affect not only small pockets of the State, but the growing national fleet of EVs. Golden Spread believes that the requests stated above are consistent with the State goals and are not contradictory to the VW Settlement order, and greatly appreciate your consideration.

⁵ See "Volkswagen Environmental Mitigation Trust: Draft Beneficiary Mitigation Plan for Texas," *Texas Commission of Environmental Quality,* 2018, p4.

⁶ Figure acquired from actual quote to an Arkansas municipality looking to install pedestal chargers in 5 sites. Typical pedestal-style Level II chargers cost around \$1,000, depending greatly on features such as "smart" charging and user payment options. Installation costs of approximately \$5,000 per site include trenching, electrical equipment (circuits, conduits, panels, breakers), permits and planning, concrete work, and final installation of the unit itself.

⁷ See "Cost Associated with Non-Residential Electric Vehicle Supply Equipment," U.S. Department of Energy 2015: p3. Available at https://www.afdc.energy.gov/uploads/publication/evse_cost_report_2015.pdf

Thank you for the opportunity to comment on this matter. Please feel free to contact me with any questions at

Sincerely,

Ruth Calderon

Environmental Policy Manager & Regulatory/Legislative Specialist

Golden Spread Electric Cooperative, Inc.

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